				T
_	1	silicon and (h or hydrogen) and (pressure near4 mbar) and (nitrogen near4 (doping or	USPAT; US-PGPUB;	2002706/19 18:06
		dopant or doped or dope)) and czochralski.ti,ab,clm.	EPO; JPO; DERWENT;	
}			IBM_TDB	
-	1	silicon and (h or hydrogen) and (pressure near4 mbar) and (nitrogen near4 (doping or	USPAT; US-PGPUB;	2002/06/19 18:06
		dopant or doped or dope)) and czochralski	EPO; JPO;	
			DERWENT; IBM TDB	
-	1		USPĀT;	2002/06/19 18:07
		near5 mbar) and (nitrogen near5 (doping or dopant or doped or dope)) and czochralski	US-PGPUB; EPO; JPO;	
		dopane of doped of dope,, and ezochturski	DERWENT;	
_	22	silicon and (h or hydrogen) and pressure	IBM_TDB USPAT:	2002/06/19 19:20
		and (nitrogen near5 (doping or dopant or	US-PGPUB;	2002,00,25
,		doped or dope)) and czochralski	EPO; JPO; DERWENT;	
}			IBM_TDB	
-	5	czochralski and pressure near3 mbar and oxygen	USPAT; US-PGPUB;	2002/06/19 19:21
}			EPO; JPO;	
}			DERWENT;	
-	23	czochralski.ti,ab. and pressure near3	USPĀT;	2002/06/19 20:37
		argon	US-PGPUB; EPO; JPO;	
}			DERWENT:	
-	5	czochralski.ti,ab. and pressure near3	IBM_TDB USPAT;	2002/06/19 20:37
		argon near3 mbar	US-PGPUB; EPO; JPO;	
}			DERWENT;	
\ _	0	czochralski.ti,ab. and pressure near3	IBM_TDB USPAT;	2002/06/19 20:38
}		argon near3 mbar near3 hydrogen	US-PGPUB;	2002/00/19 20:30
			EPO; JPO; DERWENT;	
			IBM_TDB	0000/05/10 00 00
-	3	czochralski.ti,ab. and pressure near3 mbar near3 hydrogen	USPAT; US-PGPUB;	2002/06/19 20:38
			EPO; JPO; DERWENT;	
			IBM TDB	
-	3	czochralski.ti,ab. and pressure near3 mbar near3 hydrogen and silicon.ti,ab.	USPAT; US-PGPUB;	2002/06/19 20:39
		hears hydrogen and silicon.cr, ab.	EPO; JPO;	
			DERWENT; IBM TDB	
-	3	czochralski.ti,ab. and pressure near3 mbar	USPAT;	2002/06/19 20:39
		near3 argon and silicon.ti,ab.	US-PGPUB; EPO; JPO;	
			DERWENT;	
_	13	czochralski and (noble or inert or argon)	IBM_TDB USPAT;	2002/06/20 13:51
		near4 mbar	US-PGPUB;	
			EPO; JPO; DERWENT;	
_	2	("6291874").PN.	IBM_TDB USPAT;	2002/06/20 14:11
	2	(OZJIO/4).EN.	US-PGPUB;	2002/00/20 19.11
			EPO; JPO; DERWENT;	
	-	(#6000000#)	IBM_TDB	0000/05/00 55 05
-	2	("6299892").PN.	USPAT; US-PGPUB;	2002/06/20 15:37
			EPO; JPO;	
			DERWENT; IBM TDB	

	,			r
-	43	trench adj mosfet.ti.	USPAT;	2002/01/05 20:15
	1		US-PGPUB;	
	l		EPO; JPO; DERWENT;	
			IBM TDB	ļ
\ _	9	(trench adj mosfet.ti.) and 257/\$6.ccls.	USPAT;	2002/01/05 20:15
	1	(cremen day modeletter, and 2017 voices).	US-PGPUB;	2002, 01, 00 20.10
1			EPO; JPO;	
	Į		DERWENT;	ļ
į.	ļ		IBM TDB	ļ
-	4	"6191009"	USPAT;	2002/01/29 12:24
	}		US-PGPUB;	,
	1		EPO; JPO;	
	1		DERWENT;	
	_		IBM_TDB	
-	5	(("6191009") or ("6299982") or ("5942032")	USPAT	2002/01/29 12:25
	-	or ("6224668") or ("6197109")).PN.		2002/00/01 11:02
_	5	(("6191009") or ("6299982") or ("5942032")	USPAT	2002/02/01 11:22
_	1	or ("6244668") or ("6197109")).PN.	USPAT	2002/02/01 11:29
1 _	1 4	(0224666).PN.	USPAT;	2002/02/01 11:29
	1	(4210400).FM.	US-PGPUB;	2002/00/11 10.22
			EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	410	(liquid adj crystal adj display or	USPAT;	2002/06/11 16:23
	l	lcd).ti. and 257/\$6.ccls.	US-PGPUB;	
	1		EPO; JPO;	
			DERWENT;	
			IBM_TDB	
-	64	, · · · · · · · · · · · · · · · · · · ·	USPAT;	2002/06/19 17:56
		wafer.clm. and melt.clm. and (h or	US-PGPUB;	
1	1	hydrogen).clm. and (pressure near4 mbar)	EPO; JPO;	
-	1	(nitrogen near4 (doping or dopant or doped or dope)) and czochralski.ti,ab,clm.	DERWENT; IBM_TDB	•
_ '	64	method.clm. and silicon.ti,ab. and	USPAT;	2002/06/19 17:59
	0.4	wafer.clm. and melt.clm. and hydrogen.clm.	US-PGPUB;	2002/00/19 17:39
		and (pressure near4 mbar) (nitrogen near4	EPO; JPO;	
		(doping or dopant or doped or dope)) and	DERWENT;	
1		czochralski.ti,ab,clm.	IBM TDB	
-	1	method.clm. and silicon.ti,ab. and	USPĀT;	2002/06/19 18:01
		wafer.clm. and melt.clm. and hydrogen.clm.	US-PGPUB;	
		and (pressure near4 mbar) and (nitrogen	EPO; JPO;	
1		near4 (doping or dopant or doped or dope))	DERWENT;	
	_	and czochralski.ti,ab,clm.	IBM_TDB	0000106110
[-	1	method.clm. and silicon.ti,ab. and	USPAT;	2002/06/19 18:02
		wafer.clm. and melt.clm. and (h or hydrogen).clm. and (pressure near4 mbar)	US-PGPUB; EPO; JPO;	
1		and (nitrogen near4 (doping or dopant or	DERWENT;	
}		doped or dope)) and czochralski.ti,ab,clm.	IBM TDB	
-	1.	method.clm. and silicon.ti,ab. and	USPAT;	2002/06/19 18:03
	-	wafer.clm. and (h or hydrogen).clm. and	US-PGPUB;	
1		(pressure near4 mbar) and (nitrogen near4	EPO; JPO;	
1		(doping or dopant or doped or dope)) and	DERWENT;	'
1		czochralski.ti,ab,clm.	IBM_TDB	
1-	1	method.clm. and silicon.ti,ab. and (h or	USPAT;	2002/06/19 18:03
	1	hydrogen).clm. and (pressure near4 mbar)	US-PGPUB;	
1 1]	and (nitrogen near4 (doping or dopant or	EPO; JPO;	
		doped or dope)) and czochralski.ti,ab,clm.	DERWENT;	
]_	1	eilian ti ah and /h on hudmanen) alm	IBM_TDB	2002/06/19 18:04
-	·	silicon.ti,ab. and (h or hydrogen).clm. and (pressure near4 mbar) and (nitrogen	USPAT; US-PGPUB;	2002/00/19 10:04
1		near4 (doping or dopant or doped or dope))	EPO; JPO;	
1		and czochralski.ti,ab,clm.	DERWENT;	
1 1			IBM TDB	
-	1	silicon and (h or hydrogen).clm. and	USPĀT;	2002/06/19 18:05
1		(pressure near4 mbar) and (nitrogen near4	US-PGPUB;	
1	ļ	(doping or dopant or doped or dope)) and	EPO; JPO;	
	ļ	czochralski.ti,ab,clm.	DERWENT;	
L			IBM TDB	

L Number	Hits	Search Text	T DB	Time stamp
1	601	((117/13) or (117/19) or (117/20) or	USPAT;	2003/11/13 11:52
-	002	(117/21)).CCLS.	US-PGPUB	2000,12,13 11.32
2	14	(((117/13) or (117/19) or (117/20) or	USPAT;	2003/11/13 11:53
}	1	(117/21)).CCLS.) and pulling near12	US-PGPUB;	
,	Į.	(hydrogen water "H.sub.2" "H.sub.2 O"	EPO: JPO:	
		steam) and czochralski.ti,ab,clm.	DERWENT;	
		, , , , , , , , , , , , , , , , , , , ,	IBM TDB	
-	1154	((257/620) or (438/906) or (437/83) or	USPAT;	2003/11/12 15:09
		(437/84) or (117/19) or (117/84)).CCLS.	US-PGPUB;	1
1	l		EPO; JPO;	
			DERWENT;	\
			IBM TDB	
-	1	((("257/620") or ("438/906") or ("437/83")	USPAT;	2002/01/05 19:09
		or ("437/84") or ("117/19") or	US-PGPUB;	
1		("117/84")).CCLS.) and (hydrogen with	EPO; JPO;	1
1		dop\$3 with silicon with wafer) same	DERWENT;	1
)		concentration	IBM_TDB	1
} -	90	(((20) 0 20) 0 2 (300) 0 2 (30) 0 0)	USPAT;	2002/01/05 19:10
1		or ("437/84") or ("117/19") or	US-PGPUB;	ł
[}	("117/84")).CCLS.) and czochralski	EPO; JPO;	}
			DERWENT;	
_	18	((("257/620") or ("438/906") or ("437/83")	IBM_TDB USPAT:	2002/01/05 19:11
	[or ("437/84") or ("117/19") or	US-PGPUB;	2002/01/03 19:11
		("117/84")).CCLS.) and heat adj shield	EPO; JPO;	
]		(11//01 //.cobb./ and heat adj shield	DERWENT;	}
1			IBM TDB	1
_	37	((("257/620") or ("438/906") or ("437/83")	USPAT;	2002/01/05 19:11
		or ("437/84") or ("117/19") or	US-PGPUB;	12002, 01, 00 13.11
1		("117/84")).CCLS.) and nitrogen with dop\$3	EPO; JPO;	Į.
		J	DERWENT;	1
			IBM_TDB	1
-	43	(, , == , , == , , == , , == , , == , , == , , , == , , , == , , , == , , , == , , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , , == , =	USPAT;	2002/01/05 19:12
]]		or ("437/84") or ("117/19") or	US-PGPUB;	1
1		("117/84")).CCLS.) and (argon with	EPO; JPO;	1
		hydrogen)	DERWENT;	1
ļ			IBM_TDB	
-	201	((("257/620") or ("438/906") or ("437/83")	USPAT;	2002/01/05 19:12
		or ("437/84") or ("117/19") or	US-PGPUB;	1
		("117/84")).CCLS.) and oxidation	EPO; JPO;	
			DERWENT; IBM TDB	
_	1	single adj silicon adj crystal.ti.ab. and	USPAT:	2002/01/05 19:14
		czochralski.ti,ab. and nitrogen.ti,ab.	US-PGPUB;	2002/01/03 19:14
		and hicrogenici, ab.	EPO; JPO;	
	İ		DERWENT;	
			IBM TDB	
-	54	silicon adj single adj crystal.ti,ab. and	USPAT;	2002/01/05 19:14
		czochralski.ti,ab. and nitrogen.ti,ab.	US-PGPUB;	
		- · ·	EPO; JPO;	Į l
			DERWENT;	
)		IBM_TDB	
-	805	(117/13).CCLS.	USPĀT;	2002/01/05 19:17
1	ļ		US-PGPUB;	1
	ļ		EPO; JPO;	\
1	į		DERWENT;	1
1	_	//8117/108) 0070	IBM_TDB	0000/65/05
-	0	(("117/13").CCLS.) and heat adj	USPAT;	2002/01/05 19:17
		sjield.ti,ab. and czochralski	US-PGPUB;	
ļ			EPO; JPO;	
			DERWENT;	j
_	5	(("117/13").CCLS.) and heat adj	IBM_TDB USPAT;	2002/01/05 19:17
1	3	shield.ti,ab. and czochralski	US-PGPUB;	2002/01/03 19:1/
		onitora, cryab. and czochraiski	EPO; JPO;	}
Į			DERWENT;	(
			IBM TDB	[
			TOM IND	1

Γ=	3	(zone-drawing or zone adj drawing) near12	USPAT;	2002/06/20 16:07
	ĺ	czochralski	US-PGPUB;	}
	ļ		EPO; JPO;	
			DERWENT;	
	6	(("6291874") or ("4330361")).PN.	IBM_TDB	2002/06/20 16:07
-	0	(("62918/4") OF ("4330361")).PN.	USPAT; US-PGPUB;	2002/06/20 16:07
1			EPO; JPO;	
1			DERWENT;	
1			IBM TDB	
-	2	("6291874").PN.	USPAT;	2002/12/05 20:43
1	_	(02310/3 / 11111	US-PGPUB;	12002, 12, 03 20.13
ļ			EPO; JPO;	(
			DERWENT;	1
			IBM TDB	}
] -	3	("4330361").PN.	USPAT;	2002/12/05 21:05
			US-PGPUB;	1
ł			EPO; JPO;	1
1			DERWENT;	1
]			IBM_TDB	4
-	41	pulling near3 czochralski near12 melting	USPAT;	2002/12/05 21:13
1			US-PGPUB;	
			EPO; JPO;	
			DERWENT;	
			IBM_TDB	
1 -	0	parameter of the state of the s	USPAT;	2002/12/05 21:13
1	1	near12 pressure	US-PGPUB;	
ţ.			EPO; JPO; DERWENT;	4
			IBM TDB	1
l _	1	pulling near17 czochralski near17 melting	USPAT;	2002/12/05 21:13
1	_	nearly pressure	US-PGPUB;	2002/12/03 21:13
1		nearr pressure	EPO; JPO;	1
1			DERWENT;	Ì
1			IBM TDB	1
1 -	2	("6388286").PN.	USPAT;	2002/12/06 12:18
,	1		US-PGPUB;	
4	1		EPO; JPO;	
l	1		DERWENT;	1
1			IBM_TDB	1
-	2	("6194283").PN.	USPAT;	2002/12/06 12:16
ì	1		US-PGPUB;	1
1	1		EPO; JPO;	İ
1	1		DERWENT;	ľ
	1	/# 40001 44# \ Pro	IBM_TDB	0000/10/05 10 00
_	2	("4890144").PN.	USPAT;	2002/12/06 12:20
			US-PGPUB;	(
[EPO; JPO;	
]		DERWENT; IBM TDB	
l _	2	("6323090").PN.	USPAT;	2002/12/06 12:20
1	1	(33230)0 /	US-PGPUB;	2002,12,00 12.20
1	i ·		EPO; JPO;	Ì
\	1		DERWENT;	
{	}		IBM TDB	
-	0	("hydrogen near2 pressure and	USPAT;	2003/04/11 18:01
Į.	(czochralski.it,ab.").PN.	US-PGPUB;	
			EPO; JPO;	
			DERWENT;	1
))		IBM_TDB	
-	4	hydrogen near2 pressure and	USPAT;	2003/04/11 18:02
		czochralski.ti,ab.	US-PGPUB;	1
	l l		EPO; JPO;	1
			DERWENT;	1
ĺ	_ [IBM_TDB	0000104120 10 55
_	5	· · · · · · · · · · · · · · · · · · ·	USPAT;	2003/04/12 13:33
ļ		single-crystal).ti,ab,clm. and stacking	US-PGPUB;	
]]	adj fault.ti,ab,clm. and (pressure or	EPO; JPO;	j i
		vacuum) and (hydrogen or "H.sub.2")	DERWENT;	1
	L	L	IBM TDB	L

		, , , , , , , , , , , , , , , , , , , 		1
_	185	(single-crystalline or	USPAT;	2003/04/12 13:34
		single-crystal).ti,ab,clm. and (growth or	US-PGPUB;	
		growing).ti,ab,clm. and (pressure or	EPO; JPO;	
Į.	l	vacuum) and (hydrogen or "H.sub.2")	DERWENT;	Į.
_	0	(single-crystalline or	IBM_TDB USPAT;	2003/04/12 13:35
-		single-crystalline of single-crystall.ti,ab,clm. and (growth or	US-PGPUB;	2003/04/12 13.33
		growing).ti,ab,clm. and (pressure or	EPO; JPO;	
ļ		vacuum) and (hydrogen or "H.sub.2") nearl2	DERWENT;	
1	\	(mbar or Hg)	IBM TDB	Į.
-	1 0	1 :	USPAT;	2003/04/12 13:35
}		single-crystal).ti,ab,clm. and (growth or	US-PGPUB;	1
}		growing).ti,ab,clm. and (pressure or	EPO; JPO;	
	ŀ	vacuum) and (hydrogen or "H.sub.2") near12	DERWENT;	1
	1	(mbar or mtorr or Hg)	IBM_TDB	1
-	22	3 1 3 2	USPAT;	2003/04/12 13:36
		single adj crystal or	US-PGPUB;	ĺ
		monocrystal).ti,ab,clm. and (growth or	EPO; JPO;	1
		growing).ti,ab,clm. and (pressure or	DERWENT;	
İ		vacuum) and (hydrogen or "H.sub.2") near12	IBM_TDB	
]	35	(mbar or mtorr or Hg) (single-crystalline or single-crystal or	USPAT:	2003/04/12 13:37
-] 33	single-crystalline or single-crystal or single adj crystal or	USPAT; US-PGPUB;	2003/04/12 13:3/
1	l	monocrystal).ti,ab,clm. and (growth or	EPO; JPO;	
		growing).ti,ab,clm. and (pressure or	DERWENT;	
l	1	vacuum) and (hydrogen or "H.sub.2") near12	IBM TDB	
(1	(atm or pascal or mbar or mtorr or Hg)		
-	0	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:40
1	1	single adj crystal or	US-PGPUB;	(
		monocrystal).ti,ab,clm. and (growth or	EPO; JPO;	
		growing).ti,ab,clm. and (pressure or	DERWENT;	!
	1	vacuum) and (hydrogen or "H.sub.2") near12	IBM_TDB	
1	}	(atm or pascal or mbar or mtorr or Hg) and	1	
		nitrogen near12 (doping or impurity)		
_	1	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:41
}	1	single adj crystal or	US-PGPUB;	
1		monocrystal).ti,ab,clm. and (growth or growing).ti,ab,clm. and (pressure or	EPO; JPO; DERWENT;	
1	1	vacuum) and (hydrogen or "H.sub.2") near12	IBM TDB	
1	}	(atm or pascal or mbar or mtorr or Hg) and	100-100	j
i		nitrogen near12 (doping or impurity or	İ	Ì
1	İ	doped)	Ì)
-	1		USPAT;	2003/04/12 13:42
Ì		single adj crystal or monocrystal or	US-PGPUB;	
1		czochralski).ti,ab,clm. and (growth or	EPO; JPO;	
1		growing).ti,ab,clm. and (pressure or	DERWENT;	
l		vacuum) and (hydrogen or "H.sub.2") near12	IBM_TDB	
ļ		(atm or pascal or mbar or mtorr or Hg) and		
		nitrogen near12 (doping or impurity or		
_	2	doped) (single-crystalline or single-crystal or	I HEDAT.	2003/04/12 13:43
	2	single adj crystal or monocrystal or	USPAT; US-PGPUB;	2003/04/12 13:43
!		czochralski).ti,ab,clm. and (growth or	EPO; JPO;	
		growing).ti,ab,clm. and (pressure or	DERWENT;	}
		vacuum) and (hydrogen or "H.sub.2") near15	IBM TDB	
1		(atm or pascal or mbar or mtorr or Hg) and		
1		("n.sub.2" or nitrogen) near15 (doping or		
ĺ		impurity or doped or impurities)		
-	996	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:44
1)	single adj crystal or monocrystal or	US-PGPUB;	
]		czochralski).ti,ab,clm. and (growth or	EPO; JPO;	
]		growing).ti,ab,clm. and (pressure or	DERWENT;	
] _	551	vacuum) and (hydrogen or "H.sub.2")	IBM_TDB	2002/04/12 12:44
-	551	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:44
[[]	single adj crystal or monocrystal or czochralski).ti,ab,clm. and (growth or	US-PGPUB; EPO; JPO;	
Į į	!	growing).ti,ab,clm. and (growth or growing).ti,ab,clm. and (pressure or	DERWENT;	
		vacuum) and (hydrogen or "H.sub.2") and	IBM TDB	
ļ l	!	silicon.ti,ab,clm.	1211_1212	
_ 				L

[=	240	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:45
	1	single adj crystal or monocrystal or	US-PGPUB;	l l
		czochralski).ti,ab,clm. and (growth or growing).ti,ab,clm. and (pressure or	EPO; JPO; DERWENT;	į
	1	vacuum) and (hydrogen or	IBM TDB	l
i		"H.sub.2").ti,ab,clm. and	1211_100	
	}	silicon.ti,ab,clm.		
<u> -</u>	5	(single-crystalline or single-crystal or	USPAT;	2003/04/12 13:48
		single adj crystal or monocrystal or	US-PGPUB;	
		czochralski).ti,ab,clm. and (growth or	EPO; JPO;	!
	1	growing).ti,ab,clm. and (pressure or	DERWENT;	
	}	vacuum) and (hydrogen or "H.sub.2").ti,ab,clm. near20 (mbar or	IBM_TDB	
		pascal or mtorr) and silicon.ti,ab,clm.		
_	0	czochralski.ti,ab,clm. and (growth or	USPAT;	2003/04/12 13:49
	1	growing).ti,ab,clm. and (pressure or	US-PGPUB;	
		vacuum) and (hydrogen or	EPO; JPO;	İ
	1	"H.sub.2").ti,ab,clm. near20 (mbar or	DERWENT;	
		pascal or mtorr) and silicon.ti,ab,clm.	IBM_TDB	2007/04/12 12:52
-	0	(czochralski or cz-silicon).ti,ab,clm. and	USPAT;	2003/04/12 13:53
	1	(growth or growing).ti,ab,clm. and (pressure or vacuum) and (hydrogen or	US-PGPUB; EPO; JPO;	
	1	"H.sub.2").ti,ab,clm. near20 (mbar or	DERWENT;	
	1	pascal or mtorr) and silicon.ti,ab,clm.	IBM TDB	
_	68	(czochralski or cz-silicon and	USPAT;	2003/04/12 13:54
ı	}	single-crystalline or single-crystal or	US-PGPUB;	
ı		single adj crystal).ti,ab,clm. and (growth	EPO; JPO;	
	1	or growing).ti,ab,clm. and (pressure or	DERWENT;	
	1	vacuum) near12 (mbar or pascal or mtorr) and silicon.ti,ab,clm.	IBM_TDB	\
_	1207	(czochralski or cz-silicon and	USPAT;	2003/04/12 13:55
	120.	single-crystalline or single-crystal or	US-PGPUB;	2000, 07, 22
	1	single adj crystal).ti,ab,clm. and (growth	EPO; JPO;	
	1	or growing).ti,ab,clm. and (pressure or	DERWENT;	1
	Į.	vacuum) near12 (mbar or pascal or mtorr)	IBM_TDB]
	_	stacking adj fault and silicon.ti,ab,clm.		2002/04/12 12:55
-	6	(czochralski or cz-silicon and	USPAT; US-PGPUB;	2003/04/12 13:55
	ļ	single-crystalline or single-crystal or single adj crystal).ti,ab,clm. and (growth	EPO; JPO;	1
	}	or growing).ti,ab,clm. and (pressure or	DERWENT;	ļ ļ
	1	vacuum) near12 (mbar or pascal or mtorr)	IBM TDB	1
		and stacking adj fault and	_	
	1	silicon.ti,ab,clm.		
~	2	("5993557").PN.	USPAT;	2003/04/12 14:04
			US-PGPUB; EPO; JPO;	
	}		DERWENT;	
	1		IBM TDB	
-	23	(cz-silicon or czochralski).ti,ab,clm. and	USPĀT;	2003/04/12 14:12
		stacking adj fault and (hydrogen or	US-PGPUB;	
	1	"H.sub.2") and (pressure or vacuum)	EPO; JPO;	
	1		DERWENT;	
	6	/ogusilisan on sanahralaki) ti ah al- and	IBM_TDB USPAT;	2003/04/12 14:07
_	,	(cz-silicon or czochralski).ti,ab,clm. and stacking adj fault and (hydrogen or	USPAI; US-PGPUB;	2003/04/12 14:07
	\	"H.sub.2") and (pressure or vacuum) and	EPO; JPO;	
	1	"shin-etsu"	DERWENT;	
	1		IBM_TDB	
_	11	(cz-silicon or czochralski).ti,ab,clm. and	USPĀT;	2003/04/12 14:13
	1	stacking adj fault and (hydrogen or	US-PGPUB;	
	1	"H.sub.2") and (pressure or vacuum) and	EPO; JPO;	
		(mbar or bar or atm or pascal or torr or mtorr)	DERWENT;	
_	4	(cz-silicon or czochralski).ti,ab,clm. and	USPAT;	2003/04/12 14:17
	1	stacking adj fault and (hydrogen or	US-PGPUB;	
1 		"H.sub.2") and (pressure or vacuum) near15	EPO; JPO;	
l	1	(mbar or bar or atm or pascal or torr or	DERWENT;	
	L	mtorr)	IBM TDB	ll

_	0	(cz-silicon or czochralski).ti,ab,clm. and	USPAT;	2003/04/12 14:18
		stacking adj fault and (hydrogen or	US-PGPUB;	
Í		"H.sub.2") near25 (pressure or vacuum)	EPO; JPO;	j
1		near25 (mbar or bar or atm or pascal or torr or mtorr)	DERWENT; IBM TDB	ì
]_	7	(cz-silicon or czochralski).ti,ab,clm. and	USPAT;	2003/04/12 14:28
	'	(hydrogen or "H.sub.2") near25 (pressure	US-PGPUB;	2003/04/12 14:20
1	1	or vacuum) near25 (mbar or bar or atm or	EPO; JPO;	į
	1	pascal or torr or mtorr)	DERWENT;	
			IBM_TDB	ł
-	0	stacking adj fault near15 hydrogen near15	USPAT;	2003/04/12 14:29
1	1	(mbar or mtorr or pascal)	US-PGPUB;)
1	1		EPO; JPO;	}
1	1		DERWENT; IBM TDB	l
_	Δ.	stacking adj fault and hydrogen near15	USPAT;	2003/04/12 14:30
ļ	1	(mbar or mtorr or pascal)	US-PGPUB;	2003/04/12 14:50
ļ	1	(made of model of passal)	EPO; JPO;	}
			DERWENT;	}
	1		IBM_TDB	
-	80	"shin-etsu" and hydrogen and (czochralski	USPĀT;	2003/04/12 14:31
	1	or cz-silicon)	US-PGPUB;	
1			EPO; JPO;	
	1		DERWENT;	
_	5	"shin-etsu" and hydrogen near15 pressure	IBM_TDB USPAT:	2003/04/12 14:32
i	1	and (czochralski or cz-silicon)	US-PGPUB;	2000,04,12 14.52
1]		EPO; JPO;]
	Į		DERWENT;	
	_		IBM_TDB	
-	5	,	USPĀT;	2003/04/12 14:32
1		and (czochralski or cz-silicon or cz adj method)	US-PGPUB; EPO; JPO;	
1		mechod)	DERWENT;	
1	•		IBM TDB	
_	3	("4330361").PN.	USPAT;	2003/04/12 18:15
			US-PGPUB;	
1	1		EPO; JPO;	
1			DERWENT;	
_	2	("5942032").PN.	IBM_TDB USPAT;	2003/04/13 17:02
	_	(3342032).EN.	US-PGPUB;	2003/04/13 17:02
			EPO; JPO;	
	1		DERWENT;	
	1		IBM_TDB	
-	1262		USPAT;	2003/04/13 17:02
	1	(117/34)).CCLS.	US-PGPUB; EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	17	(((117/13) or (117/19) or (117/21) or	USPAT;	2003/04/13 17:04
		(117/34)).CCLS.) and (hydrogen or	US-PGPUB;	
		"H.sub.2") near20 (pressure or vacuum)	EPO; JPO;	
			DERWENT;	
_	13	(((117/13) or (117/19) or (117/21) or	IBM_TDB USPAT;	2002/04/12 17:12
\	13	(((117/13) or (117/19) or (117/21) or (117/34)).CCLS.) and (hydrogen or	USPAT; US-PGPUB;	2003/04/13 17:13
		"H.sub.2") near20 (pressure or vacuum) and	EPO; JPO;	
1		czochralski	DERWENT;	
1 1			IBM_TDB	
[-]	455	(257/620).CCLS.	USPAT;	2003/04/13 17:14
,			US-PGPUB;	(
}			EPO; JPO;	
1			DERWENT; IBM TDB	
-	362	(438/906).CCLS.	USPAT;	2003/04/13 17:14
]]			US-PGPUB;	
			EPO; JPO;	
1			DERWENT;	
l		<u></u>	IBM_TDB	<u> </u>

		T. T		Y
-	0	(437/83).CCLS.	USPAT;	2003/04/13 17:14
1			US-PGPUB;	į
			EPO; JPO;	l
1	1		DERWENT;	
			IBM_TDB	ì
-	0	(437/84).CCLS.	USPAT;	2003/04/13 17:15
1	1		US-PGPUB;	
ļ	ļ		EPO; JPO;	(
			DERWENT;	
			IBM_TDB	
-	413	(117/84).CCLS.	USPAT;	2003/04/13 17:15
1	ł		US-PGPUB;	1
	1		EPO; JPO;	1
			DERWENT;	į į
	I		IBM_TDB	l i
-	1229	((257/620).CCLS.) or ((438/906).CCLS.) or	USPAT;	2003/04/13 17:15
1		((437/83).CCLS.) or ((437/84).CCLS.) or	US-PGPUB;	1
}	}	((117/84).CCLS.)	EPO; JPO;	1
1	1		DERWENT;	į į
			IBM TDB	(
-	4	(((257/620).CCLS.) or ((438/906).CCLS.) or	USPAT;	2003/04/13 17:16
1	1	((437/83).CCLS.) or ((437/84).CCLS.) or	US-PGPUB;	
		((117/84).CCLS.)) and czochralski and	EPO; JPO;	į i
1	}	(hydrogen or "H.sub.2") near15 (vacuum or	DERWENT;	
		pressure)	IBM TDB	ļ
_	1	("4193975").PN.	USPAT	2003/08/05 17:17
-	1 1	("4225378").PN.	USPAT	2003/08/05 17:17
_	1 1	("5706674").PN.	USPAT	2003/08/05 17:19
	2	jp-04089387\$-\$.did.	USPAT;	2003/08/05 18:58
1) p 040033674 - 4. a.a.	JPO;	2003/00/03 10:30
1	[DERWENT	ĺ
_	36	(US-4722764-\$ or US-4087374-\$ or		2003/11/09 16:02
-	30	US-6036932-\$ or US-4464222-\$ or	USPAT;	2003/11/09 16:02
	{		US-PGPUB;	}
		US-5443032-\$ or US-5614019-\$ or	EPO; JPO;	(
1	1	US-5753038-\$ or US-5706674-\$ or	DERWENT	1
	1	US-4225378-\$ or US-4193975-\$ or		
	1	US-5919306-\$ or US-6194283-\$ or]
		US-6388286-\$ or US-6299982-\$ or		}
	Į i	US-6291874-\$ or US-6162708-\$ or	<u> </u>	1
l		US-5942032-\$ or US-4330361-\$ or	ļ	
		US-6323090-\$ or US-6238478-\$ or		
]	US-4444812-\$ or US-4309241-\$ or		
	1	US-6224668-\$ or US-6139625-\$ or		
	1	US-6191009-\$ or US-6197109-\$).did. or		
		(US-20010023941-\$).did. or		<u> </u>
		(US-4330361-\$).did. or (JP-04089387-\$ or		Į į
		JP-10092761-\$ or JP-2001335396-\$).did. or		
]	(JP-04089387-\$ or US-6388286-\$ or	1]
		EP-971053-\$ or DE-3005492-\$ or		1
1		JP-03115185-\$ or EP-1136596-\$).did.		
-	410	(117/13).CCLS.	USPAT;	2003/11/09 16:02
	[US-PGPUB	[
-	92	(117/19).CCLS.	USPAT;	2003/11/09 16:03
			US-PGPUB]
-	469	((117/13).CCLS.) or ((117/19).CCLS.)	USPAT;	2003/11/09 16:03
	[US-PGPUB	(
_	14	(((117/13).CCLS.) or ((117/19).CCLS.)) and	USPAT;	2003/11/09 16:06
		(hydrogen near12 pressure)	US-PGPUB	
-	11	(((117/13).CCLS.) or ((117/19).CCLS.)) and	USPAT;	2003/11/09 16:12
1		(hydrogen near12 pressure) and (cz	US-PGPUB]
1		czochralski)		<u> </u>
-	2	(((117/13).CCLS.) or ((117/19).CCLS.)) and	USPAT;	2003/11/09 16:16
1	_	(hydrogen near12 pressure) and (cz	US-PGPUB	-0.27, -27, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20
] 1]	czochralski) and nitrogen near6 doping]
1 -	2	(117/1\$1.ccls. 117/2\$1.ccls.	USPAT;	2003/11/09 16:30
1	~ [117/3\$1.ccls.) and (hydrogen near12	US-PGPUB	=====================================
]	ļ	pressure) and (cz czochralski) and	35 13105	
]		nitrogen near6 doping		
) 1	L l	niciogen heard doping	<u> </u>	<u></u>

·				
-	2	(117/1\$1.ccls. 117/2\$1.ccls.	USPAT;	2003/11/09 16:22
ì		117/3\$1.ccls.) and (hydrogen near12	US-PGPUB	
		pressure) and (cz czochralski) and	ĺ	
}		nitrogen near6 (concentration dopant	}	
1		doping)		2002/11/02 16:02
-	9	(hydrogen near12 pressure) and (cz	USPAT;	2003/11/09 16:22
}		czochralski) and nitrogen near6	US-PGPUB;	
1		(concentration dopant doping)	EPO; JPO;	1
			DERWENT; IBM TDB	
_	3	(117/1\$1.ccls. 117/2\$1.ccls.	USPAT;	2003/11/09 16:35
		117/3\$1.ccls.) and (("H.sub.2" hydrogen)	US-PGPUB	2003/11/03 10.33
1		near12 pressure) and (cz czochralski) and	05 10105	
}		nitrogen near6 doping		1
_	14		USPAT;	2003/11/09 16:36
!]	117/3\$1.ccls.) and (("H.sub.2" hydrogen)	US-PGPUB	
1		near12 pressure) and (cz czochralski) and		
1		nitrogen		
-	2		USPAT;	2003/11/09 16:36
,		117/3\$1.ccls.) and (("H.sub.2" hydrogen)	US-PGPUB	ļ
\		near12 pressure) and (cz czochralski) and	}	}
1		nitrogen near12 concentration		
ļ —	5	(117/1\$1.ccls. 117/2\$1.ccls.	USPAT;	2003/11/09 16:44
}		117/3\$1.ccls.) and (("H.sub.2" hydrogen)	US-PGPUB	
1	1	near12 pressure) and (cz czochralski) and	1	
	_	nitrogen near12 (density concentration)		
-	5	(117/1\$1.ccls. 117/2\$1.ccls.	USPAT;	2003/11/09 16:45
		117/3\$1.ccls.) and (("H.sub.2" hydrogen)	US-PGPUB	
Į i		near12 pressure) and (cz czochralski) and		
!	,	nitrogen near20 (density concentration)	USPAT;	2003/11/09 17:02
} -	2	117/13.ccls. and (("H.sub.2" hydrogen) near12 pressure) and (cz czochralski) and	US-PGPUB	2003/11/09 17:02
Ì		neariz pressure) and (cz czochraiski) and nitrogen near20 (density concentration)	US-PGPUB	
ł _ !	29	117/13.ccls. and (cz czochralski) and	USPAT;	2003/11/09 17:20
1	23	nitrogen near20 (density concentration)	US-PGPUB	2003/11/03 17.20
ļ_ i	16	_	USPAT;	2003/11/09 17:50
		nitrogen near20 (density concentration)	US-PGPUB	2000, 21, 05 2.000
1		and hydrogen		
 -	8	117/13.ccls. and (cz czochralski) and	USPAT;	2003/11/09 18:25
		hydrogen near6 pressure	US-PGPUB	
-	0	117/13.ccls. and (cz czochralski) and	USPAT;	2003/11/09 17:53
1		hydrogen near6 pressure and (mbar pascal	US-PGPUB	
		pa)		
-	1	117/13.ccls. and (cz czochralski) and	USPAT;	2003/11/09 17:53
1]	hydrogen near6 pressure and (torr mbar	US-PGPUB	
}		pascal pa)	HODET	2002/11/00 10 05
-	10		USPAT;	2003/11/09 18:26
1		near6 (hydrogen "H.sub.2") same pulling same (cz czochralski)	US-PGPUB	
	11	same (cz czocnraiski) (heat adj treatment heating annealing)	USPAT;	2003/11/09 18:36
] -	1 1	near6 (hydrogen "H.sub.2") same pulling	US-PGPUB;	2003/11/03 10:30
]		same (cz czochralski)	EPO; JPO;	
,		Jame (CE CECONTATORE)	DERWENT;	
1			IBM TDB	
1_	17	(heat adj treatment heating annealing	USPAT:	2003/11/09 18:45
}	• •	atmosphere) near6 (hydrogen "H.sub.2")	US-PGPUB;	
}		same pulling same (cz czochralski)	EPO; JPO;	
1	ĺ		DERWENT;	
, 1			IBM TDB	
j -	1	annealing near6 "during" near6 pulling and	USPĀT;	2003/11/09 18:46
1		czochralski	US-PGPUB;	
]	l		EPO; JPO;	
	}		DERWENT;	
			IBM_TDB	
	13	(water "H.sub.2 O") near6 pulling and (cz	USPĀT	2003/11/09 19:24
		czochralski)		0000 /41 /00 10 1
-	13	(water "H.sub.2 O" moisture) near6 pulling	USPAT	2003/11/09 19:24
L	L	and (cz czochralski)	L <u></u>	

	29	(water "H.sub.2 O" moisture) near6 pulling and (cz czochralski)	USPAT; US-PGPUB; EPO; JPO;	2003/11/09 19:25
			DERWENT; IBM_TDB	
-	8	(water "H.sub.2 O" moisture) near6 pulling and (cz czochralski).ti,ab.	USPAT; US-PGPUB; EPO; JPO;	2003/11/09 19:25
			DERWENT; IBM_TDB	
-	2	("6060763").PN.	USPAT; US-PGPUB; EPO; JPO;	2003/11/09 19:46
	2	(HE021506H) DN	DERWENT; IBM_TDB	2002/11/00 10:46
-	2	("5821586").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT;	2003/11/09 19:46
-	35		IBM_TDB USPAT;	2003/11/10 09:25
		"H.sub.2 O") and (cz czochralski).ti,ab,clm.	US-PGPUB; EPO; JPO; DERWENT;	
-	96733	memc komatsu mitsubishi adj silicon shin adj etsu wacker	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2003/11/10 12:24
	10	(mama kamatsu mitsubishi adi siligan shin	DERWENT; IBM_TDB USPAT;	2003/11/10 12:26
		(memc komatsu mitsubishi adj silicon shin adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz czochralski).ti,ab,clm.	US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/11/10 12:26
-	0	(memc komatsu mitsubishi adj silicon shin adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz czochralski).ti,ab,clm. and inert adj	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/11/10 12:27
_	3	atmosphere and (hydrogen "H.sub.2 O" steam) (memc komatsu mitsubishi adj silicon shin	USPAT;	2003/11/10 12:28
		adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz czochralski).ti,ab,clm. and atmosphere	US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2000, 11, 10 12, 12
-	0	and (hydrogen "H.sub.2 O" steam) (memc komatsu mitsubishi adj silicon shin adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen	USPAT; US-PGPUB; EPO; JPO;	2003/11/10 12:28
		"H.sub.2" steam "H.sub.2 O")) and (cz czochralski).ti,ab,clm. and atmosphere and (hydrogen "H.sub.2 O" steam) and	DERWENT; IBM_TDB	
-	0	silicon.ti,ab,clm. (memc komatsu mitsubishi adj silicon shin adj etsu wacker) and ((pulling pulled)	USPAT; US-PGPUB;	2003/11/10 12:28
		near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz czochralski).ti,ab,clm. and (hydrogen "H.sub.2 O" steam "H.sub.2") and	EPO; JPO; DERWENT; IBM_TDB	
-	0	silicon.ti,ab,clm. (memc komatsu mitsubishi adj silicon shin	USPAT;	2003/11/10 12:29
		adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz czochralski) and (hydrogen "H.sub.2 O"	US-PGPUB; EPO; JPO; DERWENT; IBM TDB	
		steam "H.sub.2") and silicon.ti,ab,clm.	-21.7.100	

-	13	(memc komatsu mitsubishi adj silicon shin	USPAT;	2003/11/10 13:06
	}	adj etsu wacker) and ((pulling pulled)	US-PGPUB;	
		near6 atmosphere near6 (inert hydrogen "H.sub.2" steam "H.sub.2 O")) and (cz	EPO; JPO; DERWENT;	ł
1	į i	czochralski)	IBM TDB	
_	8	(memc komatsu mitsubishi adj silicon shin	USPAT;	2003/11/10 12:34
1		adj etsu wacker) and ((pulling pulled)	US-PGPUB;	ł
)	Ì	near6 atmosphere near6 (inert hydrogen	EPO; JPO;	
		"H.sub.2" steam "H.sub.2 O")) and (cz	DERWENT;	
		czochralski) and silicon	IBM_TDB	0000 (11 (10 10 10
-	8	(memc komatsu mitsubishi adj silicon shin	USPAT;	2003/11/10 12:49
		adj etsu wacker) and ((pulling pulled) near6 atmosphere near6 (inert hydrogen	US-PGPUB; EPO; JPO;	
	1	"H.sub.2" steam "H.sub.2 O")) and (cz	DERWENT;	
	ļ	czochralski) and silicon and (inert	IBM TDB	
	1	hydrogen "H.sub.2" "H.sub.2 O" steam)	_	
) –	255	purity near2 argon.ti,ab,clm.	USPAT;	2003/11/10 12:49
	ļ		US-PGPUB;	
	1		EPO; JPO;	
1			DERWENT;	
_	77	purity near2 argon.ti,ab,clm. and hydrogen	USPAT;	2003/11/10 13:01
	''		US-PGPUB;	= 0.00, 22, 20 10.01
			EPO; JPO;	
Į.	ļ		DERWENT;	
1	}		IBM_TDB	
-	1	("6548886").PN.	USPAT	2003/11/10 13:59
-	1 17	(("6548886").PN.) and argon (memc komatsu mitsubishi adj silicon shin	USPAT	2003/11/10 13:02 2003/11/10 13:07
_	1/	(memc komatsu mitsubishi adj silicon shin adj etsu wacker) and ((pulling pulled)	USPAT;	2003/11/10 13:07
		near6 atmosphere near6 (inert argon))	EPO; JPO;	
	ļ	near acmosphere near (inside argon,)	DERWENT;	
	}		IBM_TDB	
-	0	(memc komatsu mitsubishi adj silicon shin	USPĀT;	2003/11/10 13:07
1		adj etsu wacker) and ((pulling pulled)	US-PGPUB;	ļ
	}	near6 atmosphere near6 (inert argon)) and	EPO; JPO;	
)		nitrogen near6 (doping dopant)	DERWENT; IBM TDB	
_	1	(("6548886").PN.) and (cutting separate	USPAT	2003/11/10 15:20
	1	separating) near12 (wafer substrate)	051111	2003/11/10 13:20
1 -	2	("6548886").PN.	USPAT;	2003/11/10 16:00
ļ	,		US-PGPUB;	
1	<u> </u>		DERWENT	
_	2	jp-2000026196\$-\$.did.	USPAT;	2003/11/10 16:53
}			JPO; DERWENT	
_	1	("5942032").PN.	USPAT	2003/11/10 17:38
_	2	purity near2 argon.ti,ab,clm. and	USPAT;	2003/11/10 18:22
		manufacture near2 argon.ti,ab,clm.	US-PGPUB;	
1	1		EPO; JPO;	
			DERWENT;	
_	_	pulling near6 czochralski near6 argon and	IBM_TDB USPAT:	2003/11/10 18:23
1		nitrogen near6 concentration	US-PGPUB;	2003/11/10 10.23
		11111111111111111111111111111111111111	EPO; JPO;	
			DERWENT;	
1	[i		IBM_TDB	
-	6	pulling near6 czochralski near6 argon	USPAT;	2003/11/10 18:24
	1		US-PGPUB;	
1	Į į		EPO; JPO; DERWENT;	
			IBM TDB	
_	6	pulling near6 czochralski near6 argon and	USPAT;	2003/11/10 18:34
1		silicon	US-PGPUB;	
			EPO; JPO;	
1			DERWENT;	
			IBM_TDB	2002/11/10 10:34
-	0	czochralski near6 argon and silicon and nitrogen near6 doping	USPAT; US-PGPUB;	2003/11/10 18:34
		nicroden neare dobing	EPO; JPO;	
	ļ l		DERWENT;	
}			IBM TDB	
Coarch Hic	·	/12/02 11.54.26 NM Page 11		